

WHAT IS CLAIMED IS:

1. A low permeable hose having at least a refrigerant barrier layer and a rubber layer, wherein the refrigerant barrier layer is a laminate film having a structure such that resin layers sandwich a metal layer therebetween and having an elongation at breakage of 10 % or more.
2. A low permeable hose according to claim 1, wherein said metal layer is a metal foil and wherein at least one of the resin layers has thereon a strength maintaining layer.
3. A low permeable hose according to claim 2, wherein said strength maintaining layer is a layer composed of a polyamide resin composition or a polyester resin composition.
4. A low permeable hose according to claim 2, wherein said strength maintaining layer is an innermost layer of said resin layer and wherein said strength maintaining layer and said metal layer are bonded to each other with an aromatic polyester based adhesive.
5. A low permeable hose according to claim 1, wherein an

outermost layer of said resin layer is a polyolefin layer composed of a polyolefin resin composition.

6. A low permeable hose according to claim 5, wherein said polyolefin resin composition contains a polyolefin resin having a melting point of 120 °C or more.

7. A low permeable hose according to claim 1, wherein said rubber layer is constituted by a rubber composition whose vulcanization temperature is 120 °C or more.

8. A low permeable hose having at least a refrigerant barrier layer and a rubber layer, wherein said barrier layer is a laminate film having a structure such that resin layers sandwich a metal layer therebetween and having an elongation at breakage of 10 % or more and wherein an outermost layer of said resin layer is an adhesive layer composed of a phenol resin based composition.

9. A low permeable hose according to claim 8, wherein said metal layer is a metal foil and wherein at least one of the resin layers has thereon a strength maintaining layer.

10. A low permeable hose according to claim 9, wherein said strength maintaining layer is a layer composed of a polyamide resin composition or a polyester resin composition.

11. A low permeable hose according to claim 9, wherein said strength maintaining layer is an innermost layer of said resin layer and wherein said strength maintaining layer and said metal layer are bonded to each other with an aromatic polyester based adhesive.

12. A method for producing a low permeable hose having at least a refrigerant barrier layer and a rubber layer, comprising superimposing the refrigerant barrier layer and the rubber layer,

wherein the refrigerant barrier layer is a laminate film having a structure such that resin layers sandwich a metal layer therebetween and having an elongation at breakage of 10 % or more, and

wherein the method comprises the steps of:

laminating the resin layers in said refrigerant barrier layer and said rubber layer; and

heating said refrigerant barrier layer and said rubber layer to a temperature no lower than a melting point

of a resin that constitutes the resin layers to melt the resin and vulcanizing said rubber layer, thereby splicing said refrigerant barrier layer and said rubber layer.

13. A method for producing a low permeable hose according to claim 12, wherein the resin layers in said refrigerant barrier layer have a polyolefin layer composed of a polyolefin resin composition.

14. A method for producing a low permeable hose according to claim 12, wherein said refrigerant barrier layer and said rubber layer are spliced by heating them at 120 °C or more.

15. A method for producing a low permeable hose according to claim 12, wherein in said refrigerant barrier layer, at least one splicing surface between said metal layer and said resin layers is coated with an aromatic polyester based adhesive before said lamination.

16. A method for producing a low permeable hose having at least a refrigerant barrier layer and a rubber layer, comprising superimposing the refrigerant barrier layer and the rubber layer,

wherein the refrigerant barrier layer is a laminate film having a structure such that resin layers sandwich a metal layer therebetween and having an elongation at breakage of 10 % or more,

wherein said refrigerant barrier layer is a laminate film whose resin layer that constitutes a surface thereof has an adhesive layer composed of a phenol resin based composition, and

wherein the method comprises the step of laminating said adhesive layer and said rubber layer, thereby splicing said refrigerant barrier layer and said rubber layer.

17. A method for producing a low permeable hose according to claim 16, wherein in said refrigerant barrier layer, at least one splicing surface between said metal layer and said resin layers is coated with an aromatic polyester based adhesive before said lamination.